

ABSTRACT OF THE DISCLOSURE

A radiation detector provided in a substrate with a detection layer which is sensitive to radiation, the detector being characterized in that said detection layer is formed by a polycrystal film comprising either one of CdTe (cadmium telluride), ZnTe (zinc telluride) and CdZnTe (cadmium zinc telluride) or a laminate film of polycrystal including at least one thereof, and is doped with Cl.